

REMARKS

The newly added phrase in the currently amended Claim 7 is underlined. At first I thought that this capability is implied by my statement of "for use by physician(s)", and am grateful to the Patent Office communication of September 29, which pointed out that the said capability must be clearly stated.

There are three distinctive features of the currently amended Claim 7.

- (i) "means for accepting input for instituting or modifying the ways of taking care of the said patient's said diseased heart".
- (ii) "comprising one or more linear flow blood pumps(s)".
- (iii) "means for sending electrical pulses to said patient's said diseased heart"

The distinctive features (i), (ii), and (iii) are closely knitted together to enable a physician to do the best for his patient. For instance the main function of (ii) is to coordinate the actions of heart muscles. But it also serve to allow the physician to know almost immediately the effect of his action on his patient's heart. This point is mentioned in Claim 10, and also discussed in detail in the Figure 3, and page 5 of my specifications.

Essentially, it usually takes hours or even days for a physician to know the effect of his actions on his patient. In addition to the effect of his actions, there are many other biological and clinical factors which can camouflage the patient's response. By synchronizing the signal change with the (iii) pulses, only the true signal from the heart's response repeat after each (iii) pulse, and the accumulated true signal strength becomes very bright on the scope. The other physiological signals have nothing to do with the (iii) pulses and are averaged out into a blur.

A second example can be described as a cooperation between (i) and (ii) to make both more effective. The set of prototype commands which are mentioned in Claim 11, are also described in pages 3 and 4 of my specification. The prototype commands allow the physician to give his orders in clinical terms without worrying about how his orders are being carried out in my device. The set of prototype commands are made possible by (ii). But without (i), they are of no use. With (i), but without the prototype commands, it would very difficult for the physician to input his command into my device, which is a machine.

A third example is an arrangement for the physician to take care of his patient, when he is not there with the patient. Again this is a cooperative venture between (i) and (ii). The said arrangement is mentioned in Claim 12, and described in detail in page 6 of my specification. Because of the closely knitted nature of my device, an apparently equivalent distinctive feature usually cannot be used to replace the corresponding one in any of my three distinctive features (i), (ii), and (iii). With the above stipulation, it is easy to conclude that my claims are not unpatentable in view of any or all of the previously cited references.

LIST OF REFERENCES

- [1] "Linear Flow Blood Pump" is the subject matter of US patent #6,361,292 B1.